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**IDEAS UNLEASHED**  
**ICG - GOA UNIVERSITY ESSAY COMPETITION 2016**

**Raising the Standard of Higher Education in Goa: Challenges and Solutions**

**1. The National Scene**

In the 70 years since independence, India has improved access to higher education (i.e. college education) as measured by Gross Enrolment Ratio (GER) which gives percentage of population in the age group 18-23 that is enrolled in college. In 1950-51 India's GER was 0.7%; in 1960-61 1.4%; in 2006-07 it stood at 11%; and, by 2012 it had crossed 20% (Wikipedia). GER was 23.3% in 2014-15. The national goal is to have GER of 30% by 2020.

In spite of such progress, particularly during the last decade, there is a nagging feeling that we lag behind several countries, including many in Asia, in terms of the quality of education offered at our academic institutions.. In 2006, the then newly-constituted National Knowledge Commission (NKC) pointed to a "quiet crisis" in higher education. A few years later, Devesh Kapur, Director, Centre for the Advanced Study of India (CASA), University of Pennsylvania, described India's university system to be in "deep crisis." It has often been pointed out that there is virtually no Indian university that has consistently broken into the ranks of the top 100 institutions in world university rankings. Such rankings, however, form just one aspect of the many problems faced by higher education in India.

A major problem that we face is employability of our graduates. Only about 25 per cent of college graduates are considered employable. According to an ASSOCHAM report, with the exception of the top 20 B-schools (mostly IIMs), the majority of the 5,500 such institutions produce only 7 per cent employable MBAs, with the rest earning less than Rs. 10,000 pm. The Aspiring Minds National Employability Report found 80 per cent of engineering graduates to be unemployable. Similar problem is known to exist at post-graduate and doctoral education as well.

Other problem areas include crumbling and crumbled infrastructure; insufficient funding and disregard for research; over-regulation and poor regulation of institutions of higher learning; politicization of institutions; nepotism in faculty appointments; and, brain drain.

India's higher education needs to step up to the challenges of the 21<sup>st</sup> century. This is especially important if we are to take advantage of the so-called "demographic dividend." Over 40 per cent of India's population is under 20 years. The 15-34 age group is in excess of 400 million, the largest in the world. With growing numbers of young people heading to college, we are set to become home to the largest student population in the world. If current conditions with regard to quality and employability persist and/or do not improve, India would have wasted its opportunities.

## 2. Higher education in Goa

Goa's GER was 34.9% in the All India Survey of Higher Education (AISHE) (2010-11), among the highest among Indian states. Goa's per capita investment in higher education is the highest in the country (~Rs. 14,500). Overall, access to higher education in Goa is significantly better than the national average because of good support from the government.

Goa University, rated "A" by National Assessment and Accreditation Council (NAAC) of India, and ranked 20<sup>th</sup> by the National Institutional Ranking Framework (NIRF), is the only university created by the state. It has a reasonably good standing as of today. In addition, during the last few years, Goa has become home to institutions that are nationally-recognized for their excellence. These include the Birla Institute of Technology and Science (BITS); the National Institute of Technology (NIT) and the Indian Institute of Technology (IIT). There is a possibility that some more institutions of national importance, such as the National Institute of Design, will be in Goa soon. This makes Goa an important education hub. The experience from elsewhere, Bengaluru for example, suggests that such developments auger well for Goa in the long run. For example, the institutions of national importance are expected to have a positive impact on Goa University which serves most Goan students.

In spite of the above, concerns regarding quality of education and employability persist in Goa too. It is necessary to address these concerns by taking some concrete steps. What might these be? It is the answers to this question that ICG-Goa University Essay Competition 2016 is looking to highlight.

### Essay topic

This is the second such competition organised jointly by ICG and Goa University. The first was organized in 2014. This year's topic - **Raising the Standard of Higher Education in Goa: Challenges and Solutions** - invites students from across the state to engage with the issue of the standard and overall quality of higher education and to make recommendations to address the problem. Participating students are expected to identify the key obstacles and challenges and propose workable solutions, emphasizing more on what can be done rather than what ought to be done. What concrete steps can the state government take to improve the quality of higher education? How can employability of Goa graduates be improved? What role can the private sector play? What about the main stakeholders - the students themselves or even the larger community? How could Goa stand out in the higher education scenario at the national level?

### Select references

Ministry of Human Resource Development (MHRD) - <http://mhrd.gov.in/>  
National Knowledge Commission - <http://knowledgecommissionarchive.nic.in/>  
All India Survey on Higher Education - <http://aishe.nic.in/aishe/home>  
National Assessment and Accreditation Council - <http://www.naac.gov.in/>

**Second Edition of ICG-Goa University Essay Competition 2016**  
**“IDEAS UNLEASHED”**

The Second Edition of ICG-Goa University Essay Competition 2016 - under the banner “IDEAS UNLEASHED” - was launched at a press conference on Tuesday, 30 August, 2016, at The International Centre Goa, Dona Paula, by Professor Varun Sahni, Vice-Chancellor, Goa University, and Mr. Yatin Kakodkar, President of the Board of Trustees of ICG. Ideas Unleashed 2016 was supported by Mr. Dattaraj Salgaocar, Chairman, V.M. Salgaocar Institute of International Hospitality Education and Vice-President of the Board of Trustees of ICG. The topic for the essay competition was “Raising the Standard of Higher Education in Goa: Challenges & Solutions.” The official poster and rules of the Competition were also released at the press conference.

The competition was open to students under 25 years at Goa University and its affiliated colleges, the National Institute of Technology (NIT)-Goa, the Indian Institute of Technology (IIT)-Goa, BITS Pilani-Goa and the Goa Institute of Management (GIM).

In all, 100 entries were received from 28 colleges. Dr. Kiran Budkuley, formerly at the Department of English, Goa University; Dr. Koshy Tharakan, Professor, Department of Philosophy, Goa University; and Dr. Jyoti D. Pawar, Associate Professor, Department of Computer Science and Technology, Goa University; were the jury members for the competition.

The awards ceremony is to be held on 20th April 2017. The top three essays will be awarded certificates, trophies and cash prizes.

## **Raising the Standard of Higher Education in Goa: Challenges and Solutions**

Shenvi Sangavkar Amey

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As I sit to write about “Raising the Standard of Higher Education in Goa” and ponder over the challenges and probable solutions, I feel it is necessary to go through the goal, perspective and attributes of education. After browsing through the vast available and relevant literature on the subject, it is loud and clear that the whole purpose of the education is to bring about the holistic development of the individual. To quote Algo D. Henderson & Jean Glidden Henderson in *Higher Education in America*:

As society becomes more and more complex, the institutions are pressed to assume social obligations to train for employment, to solve social problems, to help set ethical directions for society. The purposes of higher education are several folds. They are concerned with student growth and development, the discovery and refinement of knowledge, and social impacts on the community. But all the programmes should be oriented to a central purpose.

Again a Greek writer Plato (46 AD-120 AD) wrote, ‘Education is not filling a pail but lighting a fire, mind does not require filling like a bottle but rather like wood it requires kindling to create in it an impulse to think independently and an ardent desire for truth.’ Similarly, the former president of India Dr. Sarvapalli Radhakrishnan, in his report as the chairman of University Education Commission 1948, wrote, “education is an important instrument for social, economic and cultural change.” According to him, literacy is not education; knowledge is not education but growth of wisdom and capacity to look upon other subjects with compassion. A satisfactory system of education aims at balanced growth of the individual and insists on knowledge and wisdom.

The government has done its duty to appoint various commissions to suggest changes and improve the education system in the country. One of such commission is Kothari commission (1996) which introduced 10+2 +3 scheme of education throughout the country. The report of the Kothari commission is of opinion that the education is the most powerful tool of national development.

It is expected that besides knowledge in subject taught the student should have following minimum attributes:

1. Modern youth to whom higher education is means of social and economic empowerment.
2. Accepts scholastic career and value oriented challenges
3. Environment and gender sensitive with inclusive and secular outlook
4. Synergizes traditional and modern values.
5. Able to take quick decisions and is readily employable

Does an average student graduating in our present education system in Goa is short of some of the above basic attributes? I suppose that, this question is the source of that nagging feeling, that, we lag behind in terms of quality, springs from. Addressing each of the above attributes, and trying to incorporate them in our higher education curriculum will, I suppose, raise the standard of our education system. So let us elaborate on our higher education in Goa with respect to above essential attributes.

### **Quality of teaching**

It is a matter of great pride that Goa's GER (Gross enrollment ratio) was 34.9% as per All India survey of Higher Education 20-11. This is one of the highest GER among Indian states. The access to the higher education in Goa is better than any other states in the country. Further the per capita investment in higher education in Goa is the highest in the country. It has substantial support from Government. The other side of the picture is that as demand for professional and quasi-professional education went up in last decade, it showed quantum leap in number of aspiring students to take up professional education. This resulted in increase in intake capacity of already established institutions including those totally funded by the government as well as in private/self finance institutions. New self financed institutions also came up. Though there was no such 'mushrooming' in Goa as seen in other states, the number of seats were increased to a sizable amount, some of which were not filled particularly in these self financing professional institutions. With little exaggeration it may be said that the stress was more on surplus than academic.

It is beyond doubt that the standard of any institution is decided by the quality and quantity of the regular teaching faculty existing there. There is bound to be compromise in quality of teaching and other instructions where teachers are appointed on hire and fire basis, semester to semester, year to year. There will be compromise on adequate qualification and/or experience, as better qualified and experienced aspirants will shy away from such recruitment. Such teachers are paid a consolidated amount or on hour to hour basis. With this recruitment attitude, no more than mere completion of syllabus could be achieved, and development of scholastic abilities, development of workplace skills to make the student employable

is a far cry. This was how these self financial institutions tackled the challenge of faculty requirement which came galloping with start of new institutions, and courses. This however created a challenge for good higher education.

The situation in some states was so chaotic that the controlling Authorities like AICTE have to ask these institutions to close down due to their poor academic and infrastructural standard.

The solution for this challenge, I suppose is, the authorities like university, UGC, AICTE should consider the proposal of starting a new educational institute only after ascertaining that it is based on futuristic educational and social needs and not on sporadic or spasmodic demand of the time. Further the proposal should be from an organization which has recognition in educational field. Before starting the new courses the affiliation committee should also see to that the actual appointments of the faculty, as per the student teacher ratio prescribed, is done. The same applies for infrastructure development.

### **Curriculum development**

Let us first have a close look at the requirements of an 'Curriculum'. There are two issues that are to be kept in focus while designing the curriculum. They are 'learning outcomes and Graduate attributes'. The learning outcome contains far more things than just examination outcomes. As per UNESCO's Learning Objectives, learning outcome comprises of

- 1) Fundamental of the subject studied
- 2) Application of the knowledge at workplace and in life (soft skills)
- 3) Acquiring values of positive attitude.

It is needless to say that above outcomes if acquired makes the student readily employable.

Now about Graduate attributes. In what way a graduate is different from non graduate? What is the value addition during graduate programme? To the best of my knowledge no Indian university has done any categorical study about the differences. As per my view the graduate attributes encompasses all the essential attributes of good higher education that have been described above.

There is one more challenging facet to curriculum development. It is about developing global competencies in students. While a student have acquired the fundamental knowledge of the subjects and the skills, 'global competency' would demand a different set of socio-cultural and communication skills. A lot of human interaction is envisaged in today's globalization. With human resource scenario in

multi and trans-national corporations going global it is essential to have in our university graduate curriculum a component to facilitate transition from one culture and temperament to another. One who is brought up in a conservative or religious environment, which is more likely in Goa, would feel completely out of place with colleagues from different environment. Knowledge and skill set may be competitive but if the student is brought up in traditional and closed mindset he may not be able to survive in a globally competitive world.

I feel that the curriculum in our Goan higher education institutes even including that of the technical colleges, carry very little component to do with skill development and user sector expectations and this needs to be seriously looked into. Our curriculum should address this issue prominently. Above mentioned learning outcomes and graduate attributes should be prominently stated as a preamble to be achieved. Lot of thinking and discussion should go into designing the curriculum. The experts should be drawn from reputed institutions and industries as members of Board of studies. The final draft should be compared with standard curriculum of at least five to six reputed institutions including those from abroad. Since the curriculum is going to shape the students at least for five years its implications and sanctity should be clearly understood by the members. No financial and other workload should come in way of framing the curriculum.

### **Shaping the scholastic attitude**

The implementation and the delivery of the curriculum thus framed in the way discussed above should be to inspire, promote and support the scholastic aptitude of the students. A lot depends here with the instructors and teachers who implement the curriculum and bring the finer aspects of the syllabus in such a manner to drive the student to take up challenges in a particular field such as mechatronics, biotechnology, communication etc. The higher education in Art and Culture is also not an exception to this. For example a good curriculum in journalism and mass media taught in a manner depicting the pros and cons of undue blowing-up while relaying or broadcasting a news and also incorporating the ethical practices in media-communication will be a service to the society. So I suppose the curriculum should inculcate, promote and fan the natural scholastic aptitude of the student. The concerned departments in Goa University and affiliated colleges should take up initiative in this direction.

### **Industry-Institute Interaction**

This is one of the important facets of higher education. Industries are one of the major stakeholders of the higher education. University graduates serve as the skilled manpower requirement of the industry. Hence if the needs of the industry are

reflected in the curriculum and industry people willingly participate in development of the curriculum as members of Board of Studies, it will serve the mutual interest of the university and the industry. I think this is a bilateral relationship to be honored by the academia and the industry for the social cause.

I have witnessed the enthusiasm and interest shown by the students particularly those in their final graduation semester whenever any industry related activities are organized at the institute level. These activities need to be encouraged. I suggest here that teaching should start with an actual field problem and learning should be oriented towards solution of the problem rather than learning first and searching a problem that fits into the course taught. This approach will make the students more practical and will provide the skills to take up the challenges in life.

Goa University and its fifty five affiliated colleges should try to rope in industrial expertise from twenty industrial Estates from Goa which has varied types of industries from engineering, pharmaceutical, food, processing to software development. They should also ask support from Education committee and the Industry committee of Goa Chamber of Commerce and Industries (GCCCI) to which I think will GCCCI will readily agree.

Heavy shortage of craftsman and skilled workers is felt in Goa. I place on record here the state of skilled workforce available in India as compared to other developed countries along with Human Development Index (HDI) and educational status.

Country	Sec Education	HDI	Skilled worker%
USA	94.5	3(0.9)	52
Japan	81.1	10(0.9)	80
Germany	96.7	5(0.9)	75
UK	99.7	26(0.8)	68
India	38.7	130(0.6)	02

The comparison reveals the amount of work that need to be done in increasing the percentage of skilled workers through our educational system.

The above data is fairly applicable to Goa too.

With number of Accreditation standards in place such as National Assessment and Accreditation Council (NAAC), National Board of Accreditation (NBA) maintaining the requisite standards should not be a problem for the various stake holders such as Government, Industries and the Public. Only sincere efforts and intension of

improving standard should be sole motive in seeking these accreditations. There are other benefits too in going for these accreditations. The central government has tied the financial assistance aids under schemes like RUSA, Rastriya Uchchar Shiksha Abhiyan a centrally sponsored scheme (CSS) launched in 2013, which aims to provide strategic funding to the eligible institutes of higher education, to this accreditation. It is very assuring that a most of the institutes of higher education in Goa are applying for Accreditation.

Now, with all above attributes assuming in place I present the SWOT analysis of the higher education in Goa in brief.

A. Strengths

1. Access to Quality Education
2. High demand, large youth population between age group 18-23
3. Growing middle class with increasing income.
4. Global demand
5. Conducive social and political environment

B. Weakness

1. Lack of trained staff in Goa
2. Shortage of Land in Goa in large chunks
3. Fairly complex regulatory framework
4. Lack of infrastructure

C. Opportunities

1. India is developing as a hub of higher education in Asia-Pacific region and Goa becoming an one of the centers of higher education
2. Growing Demand for quality education in Goa
3. Research and Developments picking up gradually.

D. Threats

1. Deterioration of quality due to shortage of trained staff
2. Overregulation, entrance tests, fee etc.

I now conclude with great optimism that Goa has tremendous potential and scope for improving upon the existing higher education. By proper recruitment of good teachers, development of balanced knowledge and skill based curriculum, developing platform for industry -institute interaction, good administration and ethical approach, according to me will go in a long way in raising the standard of Higher Education in Goa. By meticulously incorporating all these attributes as

discussed above I am sure Goa can indeed become a hub for Quality higher education.

(2276 words)

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## **Raising the Standard of Higher Education in Goa: Challenges and Solutions**

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"The main hope of a nation lies in the proper education of its youth," said world-famous Dutch Renaissance humanist and teacher Erasmus of Rotterdam. One does not need a mental bandwidth of a genius philosopher or an unparalleled teacher to agree to that. A sane, educated mind in a fit state is well enough. If youth forms the backbone of a country, debating how crucial educating them is in no uncertain terms discussing how much of importance the health of spinal column holds in the body of a vertebrate, and what could spinal disorder lead to.

Welcome to India, the land of more than 1.3 billion people of all sorts, 40% of which are youth; a big number, apparently. In fact, according to UN report, 2014, our country has the world's largest young population. How rapid must the progress of a nation that boasts of such a colossal human resource be? Meteoric perhaps? Well, the reality begs to differ. It does agree to the fact that we *are* growing on an international level, but why not at the velocity that simple math predicts? Where does the problem lie? Does it involve youth? The simple answer is yes, and a single line logic behind it is an uninviting government statistics that says only one out of every seven children born in the country goes to college. The biggest strength of the country, the greatest of its boons, its youth, is not looked after properly, and it is indubitably this friction in the engine of our exceptionally able nation that is not letting it soar to the height it undoubtedly merits.

The challenges in higher education in India are way too many, both at the quality as well as quantity level, the same pointed out by the fact that QS World University Rankings – an annual listing of the world's top universities – does not read out any of the Indian universities in the top hundred (with an exception of a year or two). It is also noteworthy (and alarming) that India's Gross Enrolment Ratio (GER) is only around 25% against Russia, the United States, and Australia who have their GER's as high as 75%. Although the target of Ministry of Human Resources and Development for higher education in India is 30% GER by 2020, it is quite unlikely to be met. As much as the youth population distribution is disproportionate to the number of colleges in a specific area, the quality of education overall has been compromised as well. It must therefore be our topmost priority to shift our focus to the education of our youth and thereby give grounds for their all-round development so that they could channelize all their energies for the rapid progress of our motherland.

The situation of higher education in Goa is relatively better than the other states in the country, with its GER being higher than 35%. Notwithstanding a data-wise relaxation, the institutions in Goa must be bent upon improving the stats by taking solid measures with

respect to having good strength in colleges, increasing employability, ensuring overall development of the students among other things. Presently, Goa is endowed with only one state university, Goa University, established by the Goa University Act of 1984, which has numerous colleges affiliated to itself. The state also boasts of highly reputable institutes like Indian Institute of Technology Goa, operative from 2016 (Temporary Campus, Goa Engineering College), National Institute of Technology Goa, operative from 2010 (Temporary Campus, Goa Engineering College), and one of the best private institutes of the country, BITS Goa. The aforementioned centers of learning depict how Goa has evolved as an education hub lately, but there are few problems that need to be addressed and resolved before they all can do better.

1. Campus: Whereas BITS Goa has a wonderful campus for its students to flourish on, NITG still stands land-deprived, its students craving for a well-furnished state-of-the-art campus that should have been allotted to them long back. IITG opened this year and their students have started raising the same issue of a permanent campus that must be rightfully theirs. But owing to some problems on a political level, they haven't had the good luck to see their colleges in the way they had always wanted to. It can't be denied that there is so much more to temporary stay on a crowded piece of land (three colleges on one campus, not counting ITI) than a mere emotional dissatisfaction - restrictions on institute's growth, accommodation compromises, rapid resource depletion like water, unhealthy competition and jealousy to name a few. When the sufferers speak out their unhappy student lives to their colleagues and friends of their hometowns, the word of mouth does more harm to the name of these institutes than can be anticipated, forcing future IIT/NIT aspirants to jump over the names of these colleges when filling up their counseling forms. A random sample of students picked out of the hostellers of both the institutes had similar grievances: they all were unhappy after having arrived at the best of colleges in the nation for the campus had not done them justice, they faced water scarcity in the morning because of which some students even had to skip classes, the hostels were not cared for as much as they must be, they were all overcrowded and their lifestyles really unhygienic, etc. The evident remarks they get from their professors, one student says, is that a studious pupil gets over all such odds, but doesn't the seed germinate as well as the situation around it let it, he argues.

The solution to this problem is fairly simple: Get them their campus. Let the students fly in their own sky. Even though politics may have its own role to play and it might not be as simple as it sounds to us, still the very idea of politicizing the matters concerning various centers of learning, especially when the institutes are of national importance, must never be entertained.

2. Asymmetrical focus on different disciplines: A major problem our whole nation is facing today is limited career choice for its students. It's mostly either engineering or medical, and an average Indian school pass-out is expected to either prepare for IIT or PMT; all other sides like commerce and arts are too often considered meant for 'average people.' This has led to the biasing of government's and other private sector's focus on developing and managing medical and engineering colleges and college of arts and commerce, that are already too few in number, are the victims of sheer neglect. Goa is no exception. It has IIT, NIT, BITS for engineers and GMC and other colleges for doctors but not a National Institute of Design. And unlike it is in the foreign countries, the general mindset of an average parent in the state is that his child will only have a secure future if he/she becomes a doctor or an engineer. How difficult is it for anybody to understand that a brilliant musician who despises biology and studies in Goa Medical College can never become a good doctor?

What do we do? Simple, shed the bigotry. Is this statement that electrical engineering is far more important than political science even meaningful? Not at all! Just like two complex numbers in mathematics must not be compared, two different streams must not be compared. Both have their own importance and it must be ensured at all costs that they both, and all other disciplines, blossom equally well. It is important that NGO's and student groups who are willing to volunteer for enlightening society and parents must be promoted to do so.

3. Facility: Not that the institutes' facilities lack for its students to graduate, but education is so much more than just owning a degree. A student on campus is mostly on campus, and is so occupied with dealing with his academics that they barely get a chance to intermingle with students of other colleges and streams, except on two days of the year: their tech-fests and their cultural-fests. Also, the correlation between theoretical studies and practical applications is lacking.

To tackle this problem, inter-college interactions, student-faculty meet-ups, multi-discipline projects must be encouraged as much as possible. Another incentive that can be brought into the picture is inter-state and international tie-ups in order to promote children to explore streams and the world outside of their campus.

4. The School-College Gap: The communication between schools and colleges is extremely limited, or doesn't take place at all, due to which school students do not get to interact with college students and hence can't learn from their experiences, get a

broader horizon and umpteen options to choose from before they pursue any particular course choice. This is particularly harmful in the post-twelfth class period when a student suddenly starts suffering from pre-career crisis because they are not sure of the choices they are making.

However, bridging up this gap and establishing a healthy relationship between the two could work wonders. We in Goa have innumerable good quality government schools. The authorities must take serious steps to encourage school boys and girls get into the zones of college students and make firm and productive relationships with them. For instance, interesting science and technological projects done in college must be presented before the schools and vice versa. Colleges must organize fests involving participation of school children, art fairs, quiz competitions, among other things. The gap between the schools and colleges must be eradicated by all means.

5. Reluctance to technological adaptation: Another noteworthy challenge in higher education in Goa is the teachers, guides, professors, and other mentors being disinclined to embracing change in technology in the recent times. The idea is not to dispel blackboard altogether but to welcome screens and projectors aboard. The point is to be connected socially and teach students more than what a classroom usually permits.

To keep up with the pace at which the world is changing today, one must switch to modern methodologies of getting concepts across to the students. In short and clear words, embrace change. Period.

6. Lack of industries: A place cannot prosper as an education hub, which Goa seems to be becoming and has enormous future prospects for the same, until it is backed up by industries of various kinds, be it IT or other sectors.

It is the duty of the government to take care of what all, and how, and how many industries shall be set up, without compromising on the quality of the lifestyles of the local people (for instance issues like land availability, pollution, etc. must be kept in mind). There must also be scope for promoting startups and other technical innovations that the students of Goa are so capable of doing. It comes as a very good news that NIT Goa has come up with its own startup center with a joint funding from MHRD and DST.

7. Research: Where on one side engineering students of these institutes are bagging jobs with package offers of millions of rupees, the other domain of research is lying dull and dreary. In a class of twenty students in the final year, Department of

Computer Science and Engineering, NIT GOA, only one student wants to pursue research after college. That's a terrible statistics and it needs to improve right away.

Exposure to the field by motivational sessions from eminent scientists and talks with popular R&D teams must be encouraged. Industries and colleges must have an overlapping domain where students work for the industry simultaneously, and gain some insight as to how they operate in real life. Research field must have more incentives to attract more students.

8. State level examination: The levels of entrance exams to colleges affiliated to Goa University and JEE (Main and Advances) are incomparable. Also, 50% of the seats for NIT Goa is reserved for the local students, unlike the seats of IIT Goa that is filled solely on merit. This leads to a classroom full of students with great differences in what they have been taught, according to the examination they have prepared for. More often than not, branches that get closed at All India Rank 15,000 for a non-Goan student take in students of Goa with All India Rank above 50,000 too.

Although reservation does keep up the interests of the locals, it is important to look after the school education and entrance exam preparation for the Goan students to keep them at par with the non-Goan students. The level of state examinations must be increased and a corresponding enhancement in course curriculum at a school level must be taken care of.

Better faculty should be employed if need be.

10. Drugs and Alcohol: The last place was reserved for the biggest of all problems, the all-too-easy availability of alcohol and even illegal drugs, weed, etc. in the state.' It is often heard that 'booze in Goa is so cheap.' This has had devastating outcome mostly on the students of Goa, particularly the college ones, who can effortlessly help themselves to bottles of alcohol and other hard drinks, smoke cigarettes and do drugs. The affected ones (whether the irregular consumers or the addicts in reality) are especially, but not limited to, the hostellers, for they are not Goans and are hence far away from their guardians and their supervision. Drugs and alcohol consumption is eating away the most important and indispensable section of our society, our youth, faster than termites destroying wood.

STRICT RULES MUST BE MADE TO PREVENT CIGARETTES, ALCOHOLIC BEVERAGES AND DRUGS FROM REACHING THE YOUTH. Serious steps need to be taken at the administrative level and their implementation must be ensured at all the stages. Violators must be punished accordingly, and it is even better to check the issue at the source, by either limiting their manufacture, banning sales to persons below a particular age (say 25), and

imposing high penalties on the defaulters. In the words of our present Prime Minister Mr. Narendra Modi, we must all SAY NO TO DRUGS.

In conclusion, it is really important to deal with the problems facing education so that we as Indians can get our rightful position as one of the most powerful nations of the world, and become household name for the truth that it is indeed the youth of the country that decides its fate. Meanwhile, let's not forget that it is not 'literacy' that we are pursuing; our target is 'education,' a right that belongs to every individual of the country. Let's have it!

(2,433 words)

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## **Raising the Standard of Higher Education in Goa: Challenges and Solutions**

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The national scene in the 70 years since independence, India has improved access to higher education as measured by Gross Enrolment Ratio (GER) which gives percentage of population in the age group 18-23 that is enrolled in college. In 1950-51 India's GER was 0.7% which rose to 23.3% in 2014-15. The national goal is to have GER of 30% by 2020. Technical education has grown rapidly in recent years. With recent capacity additions, it now appears that the nation has the capability to graduate over 500,000 engineers (with 4-yr undergraduate degrees) annually, and there is also a corresponding increase in the graduation of computer scientists (roughly 50,000 with post-graduate degree). In addition, the nation graduates over 1.2 million scientists. Furthermore, each year, the nation is enrolling at least 350,000 in its engineering diploma programmes. Thus, India's annual enrolment of scientists, engineers and technicians now exceeds 2 million<sup>1</sup>. However, state-wise, urban-rural, rich-poor, gender and community wise disparity persists strongly<sup>2</sup>.

Besides, the rankings announced by the Times Higher Education World University Rankings show not a single Indian higher education institution in the top 200 world universities, which is dominated by UK and US universities. The answer is that we have to focus much more on education than we have been doing in the past seven decades. Out of 194 countries in a UNDP List of Education Spends, India is at 143 with only 3 per cent of GDP as education spends which is almost half spent by other "developing" countries. States are no better. For example, Goa spends around 3 per cent of the GSDP per year on education compared to Delhi's 7 per cent as per the RBI and Brickwork reports on State finances<sup>3</sup>. This unmistakably points to the grossly insufficient focus and priority we accord to education. This can be easily summed up in a statement made by former Prime minister of India Dr. Manmohan Singh in 2007:

Our university system is, in many parts, in a state of disrepair...In almost half the districts in the country, higher education enrolments are abysmally low, almost two-third of our universities and 90 % of our colleges are rated as below average on quality parameters... I am concerned that in many states university appointments, including that of vice-chancellors, have been politicised and have become subject to

caste and communal considerations, there are complaints of favouritism and corruption<sup>4</sup>.

So what are the challenges to make our higher education workable, gain respect from students, nationally and internationally? There are three core issues which need to be addressed:

1. Improvement in teaching and administrative faculties in higher educational institutions to eliminate constant shortage.
2. Fixing the right and practical curriculum.
3. Developing proper infrastructure.

Now, let us see what the improvements in teaching and administrative faculty<sup>5</sup> should aim at:

### **1. To change an institution, one needs to change people's incentives**

The average academic or administrator in an institution is completely unaware of the institution's strategy document. If the strategy is supposed to change behaviour, one has to provide better incentives for the staff, and monitor performance from the top.

The institution's strategy works best if it is a simple list of key priorities and not an operations manual. An institution should be prepared to pay a decent salary for the privilege of a top-notch department head.

### **2. To attract the best faculty, one needs the best leaders**

If raising or maintaining education and research quality is part of the strategy, one has to hire the best scholars possible and put them in positions of power like head of the institution. The probable reason is that other great scholars will choose to be there because the culture and values of the place will likely be more amenable under a fellow researcher. Also, if the head of institution is not a good scholar, he or she may have limited credibility and power within the institution.

### **3. Control quality through hiring panels and hire the best**

Create a committee to advise the head of the institution who monitors all hiring, promotion and probation decisions.

### **4. Know the talent list and congratulate people**

It is inconceivable that a successful institution would not be fully aware of its most talented staff. Make sure that people on the ground let the head of the institution know when someone does something commendable. Then send a congratulatory note. Ensure that one or more members of staff - preferably in the HR department - know exactly who the outstanding people are, and whether they are happy or not.

### **5. Do not follow status quo, make changes but not too much**

If one wants to change an organisation for betterment, it is going to hurt. If one just wants an easy ride for a few years before one starts getting a pension, then one should not bother with a strategy for change.

However, too much organisational change drives people mad. An institution's strategy is usually initiated and led by the head. Leaders should have control of the strategy and the concomitant powers to make it happen. Usually, institutions take a very long time to change. To be the best in anything requires focus, tenacity and time.

### **6. Incentivise raising research money**

The institution needs to keep an incentive of certain per cent for members who take efforts in raising research money so that the interest in this work remains.

### **7. Cut the red tape and reduce the number of committees**

Red tape really does cause a lot of damage in the institutions. It slows everything down, affects innovation, weakens motivation, reduces productive time and, therefore, quality. Bureaucracy can also be a deterrent when trying to keep good staff.

All committees, systems and processes should be assessed and committee minutes and reports shall be cut to a minimum. Don't let the best people waste productive time on administration.

#### **8. As a leader, be accessible**

Be available not just to your top team, but to students also: eat where they eat; give a seminar or lecture directed at the student body; and let them know who you are. Have a policy of hearing what others are trying to say and be able to take bad news, too.

#### **9. Clarify the relationship between administrative and academic staff**

The core business of an institution - research and teaching - does not exist without academics. Similarly, the role of administrators is sometimes viewed as "less important" by academics. But the relationship between academics and administrators is interdependent. Better communication and a bit more networking time together could make the world of difference.

#### **10. Pick the board or council members because - and only because - they are good for the institution, and then educate them**

It is crucially important that board members understand the institutions that they are governing. Ensure that one has outstanding scholars on the board or council - individuals from amongst current staff, and, importantly, scholars or professors from outside the institution, ideally former students who are loyal to the institution.

#### **11. Tell Government 'No!'**

Being a head of the institution is without a doubt the hardest job in higher education. But it is depressing when we hear that institutions have to pay for the mess caused by the government. One should refuse any interference in the institution by the government.

## **12. Make sure the leader stays at least five years - and preferably more and give the leader plenty of power**

An institutional leader who is in post for much less than five years is unlikely to have the institution's best interests at heart.

Give a leader, power and his or her own modest pot of money, but ensure that one has a decent chair of the board or council, acting as overseer.

Having made an improvement in the teaching and administrative faculty, we would now have a look at the improvements in curriculum so as to address the needs of harmonising theory and actual practices of what has been learnt.

Modern education in India is often criticised for being based on rote learning rather than problem solving. Researchers have learned that student value integrated experience<sup>6</sup>. In addition, faculty as well as students respond favourably to cohorts, the use of practitioners, problem based learning, and field-based research<sup>7</sup>. Programmes should emphasize hands-on, applied knowledge, internships, reflective practices, case studies, and problem-based learning<sup>8</sup>. In addition, these

programmes should also organize their curricula around standards and emphasize adult learning principles<sup>9</sup>.

Duffy and Cunningham state that "learning is an active process of constructing rather than acquiring knowledge"; "instruction is a process of supporting that construction rather than communicating knowledge." This perspective has some implications to the delivery of any programme in educational administration. The first is that not everyone will achieve identical knowledge. Instead active engagement leads to a broader understanding of the issues. Learning is the outcome of interactive processes. Second, the learner is not expected to achieve expert status. The understanding and challenging of the learner is considered to be the centre<sup>10</sup>.

"Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing one's ideas and responding to others' improves thinking and deepens understanding<sup>11</sup>". In

other words, we learn through interaction, conversations, and the sharing of ideas. When we resolve conflicts, we can build knowledge. Then social interaction is essential to learning and collaborative processes enhance connections among learners<sup>12</sup>. The collaborative process also supports intentional learning, develops critical thinking skills, and enhances cognitive development<sup>12,13,14,15</sup>.

Research also suggests that the development of professional expertise requires vertical integration of experience with empirical knowledge during the preparation.

This, regardless of the field will help prospective practitioners<sup>16</sup>. Because of the importance that is placed on reflection, Dewey (1944) and Schwab (1978) contend that the interaction of analysis and action must be considered in programme design<sup>17,18</sup>. Students must be able to deliberate successfully about courses of action over a period of time and examine their own actions as well as the consequences.

Through this process students can become increasingly capable of performing complex problems and evaluating outcomes of their actions<sup>19</sup>.

Adult learning theory and practice is another aspect that must be considered when delivering a programme in educational administration. Merriam and Caffarella (1991) list five assumptions about adult learners: (a) mature adults are self-directed; adults accumulate a reservoir of experience; (c) an adult's readiness to learn is closely related to the developmental tasks of their social role. In other words, if I need to know it I will learn it; (d) adults are more concerned about problem solving than simply acquiring knowledge, and (e) they are motivated by internal factors<sup>20</sup>. This information suggests that for adult learners to learn effectively, instructors need to focus on learning opportunities for active learners and real problems in real situations<sup>21</sup>.

What implication does or should any of this have on programmes in educational administration? Perhaps programmes should focus on reflective practice, diagnose situations based on experience and knowledge, and the integration of knowledge with experience. In addition, we should look at the implication for the student. Programmes should require students to (a) analyse their actions; (b) compare their

actions to current literature; (c) analyse situations, issues and problems; (d) work not only on an individual basis but with peers, faculty, and practicing administrators<sup>16</sup>.

If we are going to look at the programme and the student, it would seem appropriate to look at the instructor. Faculty need to develop ways for the student to reflect, have time for students to practice skills learnt in class, develop guidelines for written and oral analyses of actions, and create resource bases for field activities<sup>16</sup>.

It is doubtful that even the best-planned programmes can produce caring institutional leaders if the professors leading these courses fail to act in supportive ways toward students and colleagues. Several forces often mitigate against these kinds of interactions. One of the most notable being the great myth of academia that servant leadership, collegial relationships and research, publications, tenure, and promotions cannot co-exist. Professors of education, guided by the ethic of service, must work to explode this myth. They must endeavour to find a balance between their own scholarship and their interactions with others. In their scholarship, they must pursue excellence, and in their interactions, kindness and mutual support. For some, this task may seem easy; for others, it may appear to be formidable. Regardless, it is inescapable for academicians who are genuinely concerned with developing caring and competent school leaders consistent with an ethic of service.

Focusing on content reveals that instruction must be reliant on up-to date, "best practices", cohort enrolment, team-based instruction, and field-based activities. Reflection is demonstrated through the development of portfolios. The portfolio contains writings and interpretations of the student's experiences, personal growth, and skill development. Transformation leadership is represented in the state and national standards. Core curriculum and learner objectives come from recently developed nationally recognized standards. The development of a written, philosophical educational platform helps the student to identify what they stand for, or ethics. Case studies and problems allow the student to link articulated beliefs and values to administrative practices<sup>22</sup>.

The above two improvements are incomplete without developing proper infrastructure for teaching faculty as well as the students. It has been found that half the higher educational institutions lack basic infrastructural facilities<sup>2</sup>. The infrastructure for teaching faculty means the following minimal requirements like

laptop with multi-media and graphics software, training on its use, concessional internet facility, projector, furnished training centre and separate library. Infrastructure for the students shall include educational loans, laptops, concessional internet facility, fully equipped library, well-equipped class-rooms and laboratories with latest instruments, pilot plants based on the design of modern industrial equipment and programmes like e-learning and virtual school.

Industries shall be involved in sponsoring training centres, laboratories and bearing its running costs as is being done at UDCT, Mumbai and elsewhere. Besides extensive compulsory training and co-ordinated projects between the institution and industries would be mutually beneficial for students as well as the industries.

(2,339 words)

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1<sup>ND</sup> EDITION OF ICG-GOA UNIVERSITY ESSAY COMPETITION

# RAISING THE STANDARD OF HIGHER EDUCATION IN GOA: CHALLENGES AND SOLUTIONS

### ENTRY REQUIREMENTS

The essay competition is open to students upto the age of 25 years, enrolled with:

- Goa University
- Colleges affiliated to Goa University
- Birla Institute of Technology and Science (Goa Campus)
- Goa Institute of Management
- National Institute of Technology Goa
- Indian Institute of Technology (Goa)

### RULES

- i. The essay should not exceed 2500 words.
- ii. The essay should be submitted before 31<sup>st</sup> October 2016.
- iii. The essay should be the original work and must not have been submitted to any other essay competition(s) or otherwise published. Participants will not be allowed to make any revisions to the essay, once it has been submitted.
- iv. The participant will be required to submit personal information along with the essay. The personal information form, available on the website, pertains to name, address, contact details, age and college particulars of the participant.
- v. A Screening Committee constituted by The International Centre Goa (ICG) and Goa University will first review the essays received. The selected essays will be submitted to a panel of judges for final review. The panel of judges will be selected by ICG and Goa University. The decision of the screening committee and the panel of judges will be final and binding on the participant.
- vi. The final review of the essays by the panel of judges will be completed by **15<sup>th</sup> December 2016.**
- vii. ICG and Goa University reserve the final right, where necessary, to make amendments to the above rules and to select the winners of the competition.

### AWARDS

**1<sup>st</sup> Prize - Rs. 25,000**

**2<sup>nd</sup> Prize - Rs. 20,000**

**3<sup>rd</sup> Prize - Rs. 15,000**

### LAST DATE OF SUBMISSION

**31<sup>st</sup> October 2016**

### SUBMISSION DETAILS

The essay, along with the 'Personal Information Form', should be sent by email to: [program@incentgoa.com](mailto:program@incentgoa.com) and a printed copy should be sent to:

The Director, The International Centre Goa,  
Dr. E Borges Road, Dona Paula, Goa. 403004.

For details and to download the form, please visit our website:

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